


16. (twice amended) The composite sheet material of claim 11 including a foam layer with the nonwoven web material of claim [1] 5 secured to opposite sides thereof.

Please add the following new claims:

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 --23. The nonwoven web material of claim 5 wherein the web has a basis weight of about 60 g/m<sup>2</sup> to about 160 g/m<sup>2</sup>.--

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**REMARKS**

Reconsideration of the various objections and rejections set forth in the Office Action dated May 8, 2002 is respectfully requested in view of the above amendment and following remarks.

Claims 5, 8 and 16 have been amended. Claim 23 has been added. Upon entry of this amendment, claims 2-23 will be pending in the application.

The amendment to claim 5 is supported by originally filed claim 1 and the specification at, for example, page 3, lines 6-7. The amendment to claim 8 is supported by claim 8 as originally filed. Claim 16 has been amended to change dependency only. New claim 23 is encompassed within the ranges recited in the specification at, for example, page 8, lines 18-22.

**The 35 U.S.C. §112 rejection of claim 16.**

Claim 16 was rejected under 35 U.S.C. §112, second paragraph as being indefinite because of its dependency on cancelled claim 1. The dependency of claim 16 has been changed from claim 1 to claim 5 so that this rejection is obviated.

The 35 U.S.C. §102(b) rejection of claims 2-3 and 5-6 ver U.S. Patent No. 1,956,045 t Richter.

Claims 2-3 and 5-6 were rejected under 35 U.S.C. §102(b) as having each and every feature and relationship anticipated by U.S. Patent No. 1,956,045 to Richter.

"It is axiomatic that for prior art to anticipate under §102 it has to meet every element of the claimed invention." Stoller v. Ford Motor Co., 18 USPQ2d 1545, 1547 (Fed. Cir. 1991).

The Richter reference does not disclose the use of unpulped natural fibers. Rather, the Richter reference employs "unbleached, preliberated cellulose pulps as raw material". See page 1, lines 73-74. The Richter reference specifically defines preliberated cellulose pulps as being, with bolding added: "...a pulp which, like wood pulp, has been liberated by previous digestion of wood or other fiber-bearing raw material in any suitable liquor capable of isolating the fibers as a pulp from cementitious material binding them together in the raw material." See page 3, lines 27-34. In sum, the Richter reference specifically teaches that the fibers used therein have been reduced to their elementary state as separated fibrils, or, in other words, the Richter fibers have been pulped (digested).

The Office Action may confuse some of the terminology used within the nonwoven art, possibly using unbleached and unpulped interchangeably. The following definitions, from John R. Lavigne, *Pulp and Paper Dictionary*, (1993), may be of some help.

**Pulp:** A fibrous material produced by mechanically or chemically reducing woody plants into their component parts from which pulp, paper, and paperboard sheets are formed after proper slushing and treatment, or used for dissolving purposes (*dissolving pulp or chemical cellulose*) to make rayon, plastics, or other synthetic products. Sometimes called *wood pulp*. *Id.* at 304-305.

**Pulping:** (2) In a pulp mill, the reduction of fibrous material to its component elements through mechanical means, such as pulpwood grinders, or chemically by the use of various types of cooking liquors (*pulp cooking*). *Id.* at 306.

**Bleaching:** The process of purifying and whitening pulp by chemical treatment to remove or change existing coloring material so that pulp takes on a higher brightness characteristic. . . . *Id.* at 65.

**Refining:** Pulp and paper mill operations conducted on fiber suspensions to rub, brush, crush, fray, or cut the fibers as desired in order to impart such characteristics as increased capacity to absorb water and improved (sic) sheet formation. *Id.* at 317.

Copies of pages containing the above definitions, the cover page and the copyright page of the *Pulp and Paper Dictionary* are enclosed herewith.

The present application at page 1, lines 10-20 also teaches the difference between unpulped fiber bundles and elementary fibers (such as used in the Richter reference). Unpulped fiber bundles comprise elementary fibers held together by natural components such as lignin. Elementary fibers are liberated from the unpulped fiber bundles during the pulping process.

The unpulped fiber bundles used in the claimed invention may be chopped to achieve a practical fiber bundle length, for example 10mm to 50mm. However the chopped fiber bundles still comprise elementary fibers held together by natural components such as lignin. The chopping process does not substantially liberate elementary fibers from the unpulped fiber bundles.

The chopping process is also a different process than refining of fibers. A chopping process is conducted with dry fiber bundles to achieve a desired fiber bundle length, for example, 10mm to 50mm. Refining is conducted with an aqueous suspension of fibrils. Fibrils are elementary fibers that have been liberated during a pulping operation. Fibrils are already short in length due to the pulping process, typically less than 4mm for wood pulps, and less than 12mm for plant fibers such as abaca and sisal.

Applicants' claim 5 states in one pertinent part that the nonwoven web material comprises "unpulped long natural fiber bundles". The unpulped fiber bundles of Applicants' claim 5 are not taught or suggested by the Richter reference. Pending claim 5, and claims 2-3 and 6 depending therefrom, are not taught or suggested by the Richter reference for at least these reasons.

**The 35 U.S.C. §102(e) rejection of claims 2-7, 11-13, 15 and 17 over U.S. Patent No. 5,958,186 to Holm.**

Claims 2-7, 11-13, 15 and 17 were rejected under 35 U.S.C. §102(e) as having each and every feature and relationship anticipated by U.S. Patent No. 5,958,186 to Holm.

- **The Holm reference is not properly 35 U.S.C. §102(e) prior art to Applicants' claim s.**

As stated in the Office Action, the present application is examined under 35 U.S.C. §102(e) as it existed prior to amendment by the AIPA (pre-AIPA 35 U.S.C. §102(e)).

U.S. Patent No. 5,958,186 to Holm et al lists a §102(e) date of March 19, 1997.

The present application is the U.S. National phase of International Application PCT/US98/01191, filed on Jan. 20, 1998, and claims priority from U.S. Patent No. 60/036,200, filed on January 21, 1997. Thus, the present application has a priority date (January 21, 1997) prior to the §102(e) date of the Holm reference (March 19, 1997). The Holm reference is NOT properly §102(e) prior art with respect to the present application. Claims 2-7, 11-13, 15 and 17 are NOT anticipated by the Holm reference under §102(e) for at least this reason.

- **The Office Action §102(e) rejection over Holm appears to require combination with a secondary reference and is therefore improper.**

"It is elementary that an anticipation rejection requires a showing that each limitation of a claim must be found in a single reference, practice, or device." In re Donohue, 226 USPQ 619, 621 point 2 (Fed. Cir. 1985). The Office Action appears to rely on a combination of the Holm reference and WO 91/08333 in an unsuccessful attempt to find all of the features of applicants' claims. Clearly, such a combination is not proper in a rejection under 35 U.S.C. §102(e). Claims 2-7, 11-13, 15 and 17 are NOT anticipated by the Holm reference for at least this additional reason.

- **The Holm reference does not anticipate pending claims 2-7, 11-13, 15 and 17.**

The Holm reference requires the use of "elementary fibers, i.e. detached (freed) separate fibers." See, for example, column 2, lines 28-36; column 3, lines 18-22 (describing pulped softwood and freed ramie fibers); column 4, Table 1, notes 1 and 5 (describing pulped softwood and freed ramie fibers); and claim 1 (requiring "elementary fibres").

Unpulped fibers are not very hydrophilic due to the presence of lignin and other components. Pulping and refining increases water absorption of the processed fibers. See *Pulp and Paper Dictionary*, page 317 under "refining". The use of pulped or elementary fibers in the Holm reference is consistent with the Holm reference object of achieving a material having good absorption characteristics (see column 2, line 1) and the recited end-use application of a "compact absorbing material" (see abstract) or "wiping material" (see column 3, lines 8-10). Such uses require pulped (elementary) fibers in order to provide the required absorption/ hydrophilic properties.

The Holm reference also teaches that "long hydrophilic cellulosic fibers"

have "low wet bending stiffness". See column 1, lines 51-56. Bundled or unpulped fibers maintain a high bending stiffness regardless of being wet or dry. Thus the above teaching of Holm must refer to pulped or elementary or freed fibers. This teaching further supports Applicants' position that the Holm reference is concerned only with elementary or freed or pulped fibers and does NOT teach or suggest the use of unpulped fibers or unpulped fiber bundles. Claims 2-7, 11-13, 15 and 17 are NOT anticipated by the Holm reference for at least this additional reason.

- **Claims 11-13, 15 and 17 are patentable for additional reasons.**

Claim 11 recites in one pertinent part: "A composite multilayer sheet material . . .". See also pending claim 12: "The composite sheet material of claim 11 wherein the layers are secured by hydroentanglement."; pending claim 13: "The composite sheet material of claim 11 wherein the layers are secured by chemical bonding."; and pending claims 15 and 17: "The composite sheet material of claim 11 . . .".

As stated by the court in In re Yates, 211 USPQ 1149, 1151 (CCPA 1981), when the PTO asserts that there is an explicit or implicit teaching or suggestion in the prior art, it must indicate where such a teaching or suggestion appears in the reference. The Holm reference is directed to a single layer nonwoven material. The Office Action, while asserting the 35 U.S.C. §102(e) rejection of the multilayer material of pending claims 11-13, 15 and 17 over the Holm reference, does not indicate where such a multilayer material is taught in that reference. Applicants respectfully traverse the 35 U.S.C. §102(e) rejection of claims 11-13, 15 and 17 over Holm and assert that this rejection should be withdrawn or supported. Claims 11-13, 15 and 17 are NOT anticipated by the Holm reference for at least this additional reason.

**The 103(a) rejection of claims 8-10 over U.S. Patent No. 5,958,186 to Holm.**

Claims 8-10 were rejected under 35 U.S.C. §103(a) as having each and every feature and relationship suggested by the above Holm reference as applied to claims 3-7, 11-13, 15 and 17.

- **The Holm reference is not 102(e) prior art to Applicants' claims.**

The Office Action asserts only that the Holm reference is 102(e) prior art with respect to the present specification. The Office Action further admits that each of the features of Applicants' claims 8-10 is not anticipated by the Holm reference, but speculates that the features of Applicants' claims 8-10 are obvious over the Holm reference alone.

As discussed above, the Holm reference is not properly 35 U.S.C. §102(e) prior art with respect to Applicants' claims 8-10. Therefore, claims 8-10 are NOT *prima facie* obvious over the Holm reference for at least this reason.

- **Applicants' claims 8-10 are NOT *prima facie* obvious over the Holm reference.**

As mandated by MPEP §2143:

To establish a *prima facie* case of obviousness three basic criteria must be met. First there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine the reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

As discussed above, the Holm reference does not teach or suggest each and every feature of Applicants' claim 5, or Applicants' claims 8-10 which depend directly from claim 5. Claims 8-10 are NOT *prima facie* obvious over the Holm

reference for at least this additional reason.

**The 103(a) rejection of claim 14 over U.S. Patent No. 5,958,186 to Holm in view of U.S. Patent No. 6,163,943 to Johansson.**

Claim 14 was rejected under 35 U.S.C. §103(a) as having each and every feature and relationship suggested by the above Holm reference as applied to claims 3-7, 11-13, 15 and 17 and further in view of the Johansson reference.

- **The Johansson reference is NOT properly prior art to Applicants' claim s.**

As an initial matter, U.S. Patent No. 6,163,943 to Johansson lists a filing date of June 9, 1999.

The present application is the U.S. National phase of International Application PCT/US98/01191, filed on Jan. 20, 1998, and claims priority from U.S. patent No. 60/036,200, filed on January 21, 1997. Thus, the present application has a priority date (January 21, 1997) and an International Filing Date (January 20, 1998) prior to the filing date of the Johansson reference (June 9, 1999). The Johansson reference is NOT properly prior art with respect to the present application.

The Office Action admits that all of the features of Applicants' claim 14 are not found in the Holm reference and attempts to rely on the Johansson reference for the missing features. The Johansson reference is NOT prior art with respect to Applicants' claim s. Claim 14 is NOT *prima facie* obvious for at least this reason.

- **Applicants' claim 14 is patentable for additional reasons.**

As discussed above, the Holm reference is not properly 35 U.S.C. §102(e) prior art with respect to Applicants claims. Claim 14 is NOT *prima facie* obvious over the Holm reference, with or without the Johansson reference, for at least this



reason.

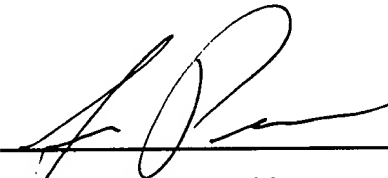
Further, as discussed above, the Holm reference does not teach or suggest each and every feature of Applicants' claim 11, or Applicants' claim 14 which depends directly from claim 11. Claim 14 is NOT *prima facie* obvious over the Holm reference, with or without the Johansson reference, for at least this reason.

In summary, Applicants have addressed each of the rejections within the present Office Action. It is believed the application now stands in condition for allowance, and prompt favorable action thereon is earnestly solicited.

Respectfully submitted,

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**Clean Copy of the Amendment**

*[Handwritten: F1]*  
5. A wet-laid nonwoven web material comprising a predominant amount of unpulped long natural fiber bundles and a pulp fiber component.

*[Handwritten: F2]*  
8. The nonwoven web material of claim 5 wherein the web has a basis weight up to about 200 g/m<sup>2</sup>.

*[Handwritten: F3]*  
16. The composite sheet material of claim 11 including a foam layer with the nonwoven web material of claim 5 secured to opposite sides thereof.

23. The nonwoven web material of claim 5 wherein the web has a basis weight of about 60 g/m<sup>2</sup> to about 160 g/m<sup>2</sup>.